

No.

7200134



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

J. Joordens' Zaadhandel B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ORCHARDGRASS

'Dolcea'



Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 15th day of March in
the year of our Lord one thousand nine
hundred and seventy-nine

[Signature]
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION DOLCEA		2. KIND NAME <i>Orchardgrass</i>		FOR OFFICIAL USE ONLY PVPO NUMBER 72 134	
3. GENUS AND SPECIES NAME Orchardgrass Dactylis Glomerata		4. FAMILY NAME (Botanical) <i>Gramineae</i>		FILING DATE 4/20/72	TIME 10 A.M. P.M.
5. DATE OF DETERMINATION 8/25/67 as per letter 5/12/78		6. FEE RECEIVED \$ 750.00		CHARGES	
6. NAME OF APPLICANT(S) J. Joordens Zaadhandel N.V.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 2e Graaf van Loonstraat 40 VENLO/BLERICK. The Netherlands		8. TELEPHONE AREA CODE AND NUMBER 503- 620-6777	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) incorporation (N.V.) Inc.		10. STATE OF INCORPORATION closed famely incorpora tion		11. DATE OF INCORPORATION 3 Oct. 1931	
12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers: LANDIS SEED (WEST) LTD., 17930 LAKE HAVEN DRIVE, LAKE OSWEGO, OR 97034 The Landis Company Inc. P.O. Box 385 - WAUPACA, Wisconsin 54981 U.S.A. 8 - 8/29/78 as per letter of 8/18/78					
13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:					
<input checked="" type="checkbox"/> 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)					
<input checked="" type="checkbox"/> 12B. Exhibit B, Botanical Description of the Variety as per letter of 5/12/78					
<input checked="" type="checkbox"/> 12C. Exhibit C, Objective Description of the Variety as per letter 5/12/78					
<input checked="" type="checkbox"/> 12D. Exhibit D, Data Indicative of Novelty					
<input checked="" type="checkbox"/> 12E. Exhibit E, Statement of the Basis of Applicant's Ownership					
The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. (See Section 52, P.L. 91-577).					
14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					
14B. Does the applicant(s) specify that this variety be limited as to number of generations? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			14C. If "Yes," to 14B, how many generations of production beyond breeder seed? 3		
Applicant is informed that false representation herein can jeopardize protection and result in penalties.					
The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).					

(DATE)
April 20th 1972

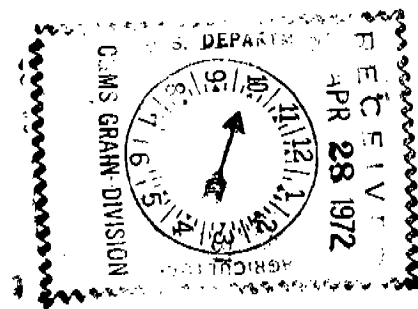
(DATE)

J. Joordens Zaadhandel N.V.
Venlo-Blerick

(SIGNATURE OF APPLICANT)

1

INSTRUCTIONS



GENERAL: Send an original copy of the application, exhibits and \$50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety.
- 12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, ~~chemical tests, etc.~~
- 12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

Orchardgrass Application No. 7200134 DOLCEA.

Exhibit A.

There are 8 lines included in the cross.

The lines were plants without silicon teeth on the leaves and stems.

The criteria of selection were yield and softness of leaves and stems.

The type of variants:

There were plants without softness of leaves.

Plants with an other heading date.

Plants with an other plant width and an other growth habit.

The variety DOLCEA has for 95-100 % plants without silicon teeth.

The variety has been tested in Holland and Germany and during several years they have tested the variety on stability.

Enclosed a copy of the bundessortenamt in Germany where Dr. Beuster granted the stability for the variety Dolcea for two years 1972 and 1973.

In Holland the variety has also plant breeders rights so stability and homogeneity are granted.

The original plants are in the field on our breedingfarm and from this plants we produce-breeder seed and from breeder--seed we produce foundation-seed. From foundation-seed we produce the registeres-seed and from the registered-seed we produce certified-seed.

Before we use the breeder-seed or other basicseed it is tested by the N.A.K. Wageningen for stability and homogeneity.

Orchardgrass Application No. 7200134 DOLCEA.

Statment of stability.

The variety DOLCEA is tested in Holland and Germany during several years.

All the samples were found within the limit, regarding:

- date of ear emergency.
- plant height.
- plant width.
- growth habit.
- broadness of leaves.



J. JOORDENS' ZAADHANDEL B.V.

Postbus 7823

5995 ZG Kessel LB

AMROBANK NV VENLO
NUMMER 48.40.40.480
POSTREKENING 1031819
K.V.K. VENLO NR 1006
TELEX NUMMER 58412
TELEFOON 04782-1888

United States Department of Agriculture
Attn to Mr. Lary W. Dosier
Beltsville, Maryland 20705.
U.S.A.

pj.

KESSEL (Holland), 12-5-1978,
OYEN 3A

Dear Mr. Dosier,

As you know the variety Dolcea is a dutch variety and i cannot give you more information about resistance to *Mastigosporium rubicosum* in comparison to the varieties Clatsop and Ina.

In Europe there are no trials with these two varieties so i cannot give you the information.

Also we do not know the variety OX-1.

Further information.

The date of determination for the variety Dolcea is 25-8-1967.

Exhibit A.	1972	1973
Plants without softness of leaves	0,6%	0,5%
Plants with an other heading-date	0,5 %	0,4%
Plants with an other plantwidth and an other growth habit	0,3%	0,3%

Exhibit B.

The information about the differens between the variety Tenderbite and the variety Dolcea comes from the R.I.V.O. Wageningen.

The technical report in witch the variety Dolcea becomes breeders rights, they use the leafwidth and growth habit as characteristics to prove that the variety Dolcea differs from the variety Tenderbite.

We have now statistical analyses.

4

Alle kopen en verkopen geschieden, wanneer niet anders overeengekomen op Algemene Handelevoorwaarden (A.H.V.Z.)-Leveringen af hier. Goederen reizen voor rekening en risico van de koper. - Alle betalingen dienen te geschieden binnen 30 dagen te rekenen vanaf factuurdatum. - Bij niet tijdige betaling is 1 % rente per maand verschuldigd te rekenen vanaf de vervaldatum. - Alle kosten van inning zowel gerechtelijk als buitengerechtelijk komen ten laaste van koper. De kredietbeperkingtoeslag mag bij betaling binnen een maand in mindering worden gebracht.

BUNDESSORTENAMT

Prüfabteilung 4

3011 Bemerode, den 20. Dez. 1973

Firma
Feldsaaten Freudenberger
GmbH & Co KG

415 Krefeld 11
Postfach 104

Betr.: Ergebnis der Registerprüfung 19 73

Art: Knaulgras Sortenbezeichnung: D o l c e a Kenn-Nr. KL 38

Prüferte: Scharnhorst und Eder am Holz
Registeranlagen 1972 und 1973 (Aussaatjahr)
Anbaudaten: Beobachtungsjahr 1973

1) Gruppe:

Untergruppe:

Teilgruppe:

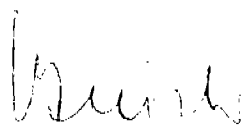
2) Merkmalsfeststellungen:

Ich verweise auf den Jahresbericht 1972 vom 21. März 1973.

3) Feststellung zur: *

- a) **Neuheit/Unterscheidbarkeit:** ~~Neuheit/Unterscheidbarkeit~~, voraussichtlich, ~~Neuheit~~ — gegeben
stability b) **Beständigkeit:** ~~Beständigkeit~~ — gegeben grantid
c) **Homogenität:** ~~Homogenität~~ — gegeben

4) Bemerkungen:


Dr. Beuster

* Nichtzutreffendes ist gestrichen

Orchardgrass Application No. 7200134 DOLCEA.

Statment of Novelty.

EXhibit B.

The variety Dolcea is a new variety bred by J:JOORDENS'ZAADHANDEL B.V.

The variety DOLCEA shows resemblance with the variety Tenderbite, these two varieties have leaves and stems without silicon teeth.

The variety Dolcea differs from Tenderbite by an earlier headingdate (Dolcea 48 Tenderbite 50) and a finer leaf.(Dolcea fineness of leaves 8,Tenderbite 6)

The variety Dolcea has a more flat growth habit as the variety Tenderbite.

Dolcea, L. 2165

Kropaar. Indeling van het sortiment

vroegheid van doorschieten in het tweede jaar	bladkleur	smal blad <i>small leaf</i>	tamelijk smal blad	tamelijk breed blad	breed blad	tamelijk smal blad	tamelijk breed blad	blad zonder kiezelvondjes <i>leaf without silica granules</i>
vroeg <i>early</i>	lichtgroen				Dura			
	lichtgroen	Karo						
tamelijk vroeg	tamelijk lichtgroen		Dagona Dorise	Lotto Lemba	Oberweilshst			
	tamelijk donkergroen			Modac Heidac Phylox Unke	Marita Wallius			
	lichtgroen							Tenderbite
tamelijk laat	tamelijk lichtgroen		Baraula HD 2					
	<i>20/200</i> tamelijk donkergroen <i>dark green</i>		Dactimo					
laat <i>late</i>	lichtgroen <i>light green</i>				Heistenkamp			

OBJECTIVE DESCRIPTION OF VARIETY
ORCHARDGRASS
(*Dactylis glomerata* L.)

NAME OF APPLICANT(S)

J. JOORDENS 'ZAADHANDEL B.V.

VARIETY NAME OR TEMPORARY DESIGNATION

Dolcea

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)

Kazernestraat 6 Elerick-Venlo. The Netherlands

FOR OFFICIAL USE ONLY

PVPO NUMBER

7200134

Place the appropriate number that describes the varietal character of this variety in the boxes below. Fill unused columns with zeroes (e.g. when number is 99). In comparisons to Potomac (standard variety) be sure to strike out the comparative term which does not apply [e.g. (~~shorter~~) (longer)]; the value should only be used to indicate that the varieties are equal. The symbol ▲ indicates a decimal point. Characteristics described, including numerical measurements, should represent those which are TYPICAL for the variety. Measured data should be for SPACED PLANTS. Any recognized color fan, e.g. Royal Horticultural Colour Chart, may be used to determine plant colors; designate system used: _____ Give location of test area: _____ Ranges of values are valuable and may be included with additional description elsewhere in the application.

NOTE: FOR SINGLE PLANT DATA A MINIMUM OF 100 PLANTS IS SUGGESTED.

1. PLOIDY:

1 = DIPLOID (2N = 14)

2 = TETRAPLOID (2N = 28)

3 = OTHER (Specify) _____

2. ADAPTATION (for forage or pasture):

1 = NORTHEAST

2 = EAST CENTRAL

3 = SOUTHEAST

4 = NORTH CENTRAL

5 = SOUTH CENTRAL

6 = PACIFIC NW.

7 = SOUTHWEST

8 = OTHER (Specify) _____

3. WINTER HARDINESS:

3 = TENDER (HALLMARK)

5 = INTERMEDIATE (PENNLATE)

7 = HARDY (CHINOOK)

4. MATURITY:

SEASON:

1 = VERY EARLY (BOONE)

2 = EARLY (STERLING)

3 = MIDSEASON (PENNMEAD)

4 = LATE (PENNLATE)

5 = VERY LATE (MASSHARDY)

FLOWERING DATE (50% BLOOM) COMPARED TO POTOMAC . . .

DAYS (~~EARLIER~~) (LATER)

BEGINNING OF SPRING GROWTH COMPARED TO POTOMAC . . .

DAYS (EARLIER) (LATER)

5. PLANT HEIGHT (From soil level to top of panicle):

CM. TALL; COMPARED TO POTOMAC . . .

CM. (SHORTER) (TALLER)

6. PLANT GROWTH TYPE (at maturity):

in the autumn in year of sowing
TYPE: 1 = PROSTRATE (S-143)

2 = INTERMEDIATE (PENNMEAD)

3 = ERECT (BOONE)

PLANT WIDTH: DIAMETER ACROSS 2ND YEAR PLANT (TO TIPS OF OPPOSITE PANICLES). USE SAME OR COMPARABLE PLANTS AS FOR PLANT HEIGHT.

CM. PLANT WIDTH; COMPARED TO POTOMAC . . .

CM. (NARROWER) (WIDER)

EARLY LEAFINESS:

1 = PANICLE TILLERS EXERTED BEFORE BARREN TILLERS

2 = PANICLE AND BARREN TILLERS EXERTED TOGETHER

NO. PANICLE TILLERS AT MATURITY

NO. BARREN TILLERS AT MATURITY

LEAF ELEVATION DATA: (USE SAME OR COMPARABLE PLANTS FOR BOTH CHARACTERS)

CM. LENGTH OF 5TH INTERNODE BELOW PANICLE (USUALLY 1ST NONCONTRACTED INTERNODE)

CM. TOTAL STRAW LENGTH (TO LOWEST BRANCH OF PANICLE)

7. LEAF:

☐ CULM LEAF ATTITUDE (AT EARLY BOOT): 1 = ERECT (ORBIT) 2 = DROOPING (POTOMAC)
 1 ☒ LEAF COLOR: 1 = YELLOW GREEN (LATARI) 2 = GREEN (STERLING) 3 = DARK GREEN (POTOMAC)
 4 = BLUE GREEN (SUMAS)

as per letter 5/12/78

LEAF HAIRINESS (% PLANTS WITH EACH SURFACE):

% GLABROUS % SLIGHTLY PUBESCENT % PUBESCENT

MM. WIDTH (FIRST LEAF BLADE BELOW FLAG LEAF); COMPARED TO POTOMAC MM. (NARROWER) (WIDER)
 MM. LENGTH (FIRST LEAF BLADE BELOW FLAG LEAF); COMPARED TO POTOMAC MM. (SHORTER) (LONGER)

8. PANICLE: (from lowest panicle branch to tip of rachis):

CM. PANICLE LENGTH; COMPARED TO POTOMAC CM. (SHORTER) (LONGER)
 NO. PRIMARY BRANCHES NO. SPIKELETS OF LOWEST GLOMERULE (SPIKELET CLUSTER)
 CAST (SECONDARY COLOR) OF PANICLE: 1 = YELLOWISH 2 = BROWN 3 = PURPLE 4 = OTHER (Specify)

PANICLE TYPE: IN THE TABLE BELOW GIVE PERCENTAGE OF PLANTS WITH EACH PANICLE TYPE. PANICLE TYPE IS DETERMINED BY THE ANGLES FROM THE VERTICAL FORMED BY (A) THE RACHIS TIP AND (B) THE LOWEST BRANCH.

(A) ANGLE OF RACHIS TIP (FROM VERTICAL)

(B) ANGLE OF LOWEST BRANCH (FROM VERTICAL)	(< 30°)	0° (ERECT)	< 45°	> 45°
	(30° - 90°)			
	(> 90°)			

9. LEMMA (first spikelet of lowest cluster):

LEMMA HAIRINESS (% PLANTS WITH EACH SURFACE):

% GLABROUS % PUBESCENT

LEMMA KEEL HAIRINESS (% PLANTS WITH EACH SURFACE):

% GLABROUS % CILIATE

% PLANTS WITH NOTCHED LEMMA APEX
 % PLANTS WITH LEMMA AWNS

MM. DEPTH APICAL NOTCH
 MM. TYPICAL AWN LENGTH

10. SEED:

1.04 1.04 ϕ 5/12/78 MM. WIDTH; COMPARED TO POTOMAC MM. (NARROWER) (WIDER)
 5.16 5.16 ϕ 5/12/78 MM. LENGTH; COMPARED TO POTOMAC MM. (SHORTER) (LONGER)
 7 MG. PER 1,000 PURE SEED; COMPARED TO POTOMAC MG. (LIGHTER) (HEAVIER)

11. DISEASE AND INSECT RESISTANCE (rate resistance 0-9, Where 0 = not tested, 1 = 100% susceptible, and 9 = 100% resistant):

POWDERY MILDEW (ERYSIPHE GRAMINIS)
 ANTHRACNOSE (COLLETOTRICHUM GRAMINICOLA)
 OTHER (Specify) _____

STRIPE SMUT (USTILAGO STRIIFORMIS)

11. DISEASE AND INSECT RESISTANCE (Continued)

RUST AND LEAF SPOT: SPECIFY AS COMPLETELY AS POSSIBLE INCLUDING SPECIES AND RACES WHERE KNOWN. IF GENERALIZED RESISTANCE OR SUSCEPTIBILITY IS CLAIMED (FIRST BOX), INCLUDE OR APPEND EXPLANATION. (0 = NOT TESTED, 1-9 = 100% SUSCEPTIBLE TO 100% RESISTANT, RESPECTIVELY.

COMMENTS:

0 RUST
 0 STEM RUST (PUCCINIA GRAMINIS)
 0 CROWN RUST (P. CORONATA)
 0 LEAF RUST (P. RUBIGO-VERA)
 0 STRIPE RUST (P. GLUMARUM)

COMMENTS:

0 LEAF SPOT
 0 LEAF STREAK (SCOLECOTRICHUM GRAMINIS)
 0 LEAF BLOTCH (STAGONOSPORA ARENARIA)
 0 PURPLE LEAF SPOT (STAGONOSPORA MACULATA)
 0 SCALD (RHYNCHOSPORIUM ORTHOSPORIUM)
 0 LEAF SPOT (ASCOCHYTA GRAMINICOLA)
 0 LEAF SPOT (MASTIGOSPORIUM RUBICOSUM)
 0 LEAF SPOT (HELMINTHOSPORIUM SPP.)
 0 LEAF SPOT (SEPTORIA SPP.)
 0 OTHER

12. INDICATE THE VARIETY THAT MOST CLOSELY RESEMBLES THE APPLICATION VARIETY FOR THE FOLLOWING CHARACTERS:

CHARACTER	VARIETY	CHARACTER	VARIETY
LEAFINESS		SEEDLING VIGOR	
WINTER HARDINESS		SEED SIZE	
FROST RESISTANCE		% LIGNIN	
SUMMER DORMANCY		PERSISTENCE	
HEAT TOLERANCE		TILLERING	

REFERENCES:

R. G. STAPLEDON, COCKSFOOT GRASS (DACTYLIS GLOMERATA L.) ECOTYPES IN RELATION TO THE BIOTIC FACTORS. JOURNAL OF ECOLOGY 16:71-104 1928.

P.F. PARKER, GENETIC VARIATION IN DIPLOID DACTYLIS III PANICLE, SPIKELET AND FLORET CHARACTERS. HEREDITY 24:383-405 1969.

COMMENTS:

Orchardgrass Application No. 7200134 DOLCEA.

Exhibit D.

The variety Dolcea has soft leaves and fine leaves, so the quality is very good. The variety has a lower persistence as the varieties Baraula(7½) Dagoma(8) Dorise(8) and Lemba (8) .(Dolcea(6)).

The leaves stems and flowers are for more than 95 % free of silicon teeth and are therefor very soft and patible.

The growthritme is slow in the beginning but later on the growth ritme is good. It needs a good fertilizer and performs best on a fertile soil.

The seed is total differant from the seed of normal orchardgrass. It is shorter,thicker,and heavier than normal seed. The volume weight is about twice as normal.



J. JOORDENS' ZAADHANDEL N.V.

2e GRAAF VAN LOONSTRAAT 40
TELEFOON 04700 - 21545 (2 LIJNEN)
POSTREKENING 1 03 18 19

VENLO-BLERICK

Telegram-adres: JOORDENS VENLO

Bankiers: BANK VAN HAFFMANS & STEEGH N.V., VENLO
AMSTERDAM - ROTTERDAM BANK N.V., VENLO

Erkend Selectiebedrijf voor Landbouwzaden

VENLO-BLERICK,
HOLLAND

EXHIBIT E: Statement of the Basis of applicant's Ownership.

Hereby we declare that the variety of Orchard grass
"DOLCEA" is created on our own breeding station by
Ingenieur Marc Joordens and is owned totally and
allone by our company.

J. JOORDENS' ZAADHANDEL N.V.
2e Graaf van Loonstraat 40
Venlo-Blerick, Holland.